

REMARKS/ARGUMENTS

Claim 1 has been objected to because of informalities. Claim 1 has, accordingly, been amended to correct the objected portion thereof.

Claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 10 has, accordingly, been amended to overcome this rejection.

Claims 1, 7-10, 12, 15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briancon (U.S. Patent 6,266,513) in view of Simbirski et al. (U.S. Patent 6,895,014). Claims 2-6, 11, 13-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briancon in view of Simbirski and further in view of Sinclair (U.S. Patent Publication 2003/0073461).

In response, the applicants have reviewed the cited references in detail and believe that the present claims are patentable thereover for the reasons to be discussed hereinbelow.

The present invention uses a combination of broadcast messages and individual messages to improve the reliability of a message system from a central location to a plurality of remote devices. The particular message to be communicated to the remote devices is that of a curtailment command to users having comfort system with thermostats. The primary means of communication is by way of broadcast messages, but when it is determined that certain of the remote devices are not receiving the broadcast messages, those particular devices are communicated with by way of individual messages. Thus, the individual messages are used to "boost" the broadcast message system by sending the individual messages to the devices on the list of users not receiving broadcast messages.

The Briancon reference shows the use of a system controller for sending out individual messages, with acknowledgment messages then being sent from the terminal devices. When an acknowledgment is not received, the message is retransmitted over an alternative path until an acknowledgment is received. Thus, all of the communications are by way of individual messages, and there is no teaching or suggestion that broadcast messages be used in any way.

The Simbirski patent shows a polling technique for creating and maintaining a "list" of devices that do not receive the polling. However, the reference does not switch between two different methods (i.e. broadcast and individual) as in the present invention but rather, based on the results of the polling, Simbirski simply changes the polling frequencies based on the responses. Thus, this reference uses only the broadcast method to poll the modems, and there is no showing or suggestion that this be followed up by individually addressed messages to those not receiving the broadcast. In contrast, the present system does not lead to "polling" but relies on the test broadcast to generate a list of devices that require the individual messages.

The present patent deals with controlling tens of thousands of thermostats via a single broadcast message for the system to be effective to the utility companies. The use of individual messages or polling when ten of thousands of devices are present would consume too much time and clog the network making the response time system too long for effective energy curtailment. The present patent deals with the method to enhance the speedy broadcast message for selective "boosting" via individual messages of a small fraction of the devices to improve overall performance.

The Sinclair reference shows a wireless communication and control system for use in a domestic environment to allow a user at one location to operate equipment at a remote location. This is accomplished, in one form, by way of a radio frequency wireless communication. In one embodiment, when the temperature sensor detects a temperature below 5°C, for example, the lounge heater is caused to be turned on. Thus, there is no "controlling a thermostat" as suggested by the Examiner. Sinclair simply uses the thermostat as a feedback to indicate when the lounge heater should be switched on. The Examiner has indicated that "The internet is used as a medium to control the thermostat remotely (see [0167])". The applicants have reviewed paragraph [0167] but are unable to find a reference to controlling the thermostat remotely. However, in any case, the Sinclair reference is simply for a single user at one location to operate equipment at a single remote location. This is

substantially different from the applicant's invention wherein a single broadcast message is broadcast to tens of thousands of thermostats and then, based on the failure of certain of those not replying, sending out individual messages to those locations.

The Examiner has indicated that motivation to combine Sinclair with the other two references is evident from the discussion in Sinclair of accommodating the invention disclosed in Sinclair with various types of wireless networking needs, and the desire to provide a backup system of wireless control systems in the event of a power failure. However, the suggestion to use various types of wireless network needs and to provide a backup system of wireless control systems is discussed in the context of a single user communicating with a single remote location. There is no suggestion in the Sinclair reference to use the techniques discussed for sending a single message from a central location to a plurality of remote devices. The apparatus, function and purpose of the Sinclair system is so different from those of the other two references that one skilled in the art is not likely to combine the features of these references. Even assuming, arguendo, that they were combined, they would not result in the present invention as claimed.

Referring to the claims, claims 1, 10 and 15 recite a method of controlling from a central location a plurality of remote devices by first sending a test broadcast message from the central location to the plurality of remote devices, recording a list of those remote devices that did not receive the test message and then sending via other than broadcasting, a copy of said actual broadcast message to those remote devices that did not receive the message. As discussed hereinabove, Briancon uses only individual messages and Simbirski uses only broadcast messages, and there is no teaching or suggestion in either of those references to use a combination of broadcast and individual messages as taught and claimed by the applicants.

The Examiner has indicated that motivation to combine these references "is evident from the discussions present in the background portions of the respective specifications. For instance, Briancon discloses the need for reducing the amount of retransmission efforts for missing message reconciliation data (see column 1, lines

54-60)". In this regard, the applicants have reviewed that portion of the specification, as specified by the Examiner and do not find the discussion as suggested by the Examiner. Even if this discussion is found in another location within the specification, however, the subject matter of this reference pertains only to individual messages rather than to broadcast messages and therefore should not reasonably be considered as suggestive of combining the Briancon reference with the Simbirski reference.

Similarly, the Examiner has suggested that the motivation to combine the two references as provided by Simbirski disclosing "the need to reduce the amount of polling messages sent, in other words reducing the amount of unnecessary polling". Applicants would suggest that this phrase does not motivate one to combine the references since Simbirski is concerned with only broadcast messages, and suggestions of reducing the amount of polling messages pertains only to broadcast messages and cannot reasonably be construed as suggesting a combination with Briancon which deals with individual messages only.

Claims 2-6, 11, and 16-18 all add further features relating to remote devices having a thermostat whose setting can be changed by a broadcast message and particularly to curtailing the temperature settings of the thermostat. As discussed hereinabove, Sinclair reference teaches only a single user at one location operating equipment at a single remote location and cannot reasonably be considered to teach, either by itself or in combination with the other cited references, a changing of settings on a plurality of remote devices by way of a broadcast message as shown and claimed by the applicants.

For the reasons discussed hereinabove, the applicants believe that the claims, as amended are patentably distinctive over the cited references. A reconsideration of the Examiner's rejections and a passing of the case to issue is therefore respectfully requested.


If the Examiner wishes to expedite disposition of the above-captioned patent application, he is invited to contact Applicant's representative at the telephone number below.

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Reply to Office Action of May 27, 2005

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 03-0835.

Respectfully submitted,

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